

I Claim.

1. A kiln structure for producing charcoal from wood members comprising:
 - a. a platform adapted to support the wood members above a floor surface;
 - b. the wood members supported in an axial array on the platform;
 - c. filling material surrounding each of the wood members, the filling material forming a surrounding jacket over, under and between the wood members;
 - d. a layer of sawdust applied over the surrounding jacket;
 - e. an earth layer applied over the layer of sawdust ; and
 - f. at least one ignition access port extending through the surrounding jacket, sawdust layer and earth layer.
2. The kiln structure of claim 1, wherein the platform is adapted to support the wood members in an axial array.
3. The kiln structure of claim 1, wherein the earthen layer is substantially free of stone material.
4. The kiln structure of claim 1, wherein the earthen layer is substantially free of metal materials.
5. The kiln structure of claim 1, wherein the wood members comprise hardwood.
6. The kiln structure of claim 5, wherein the wood members comprise birch wood.
7. The kiln structure of claim 1, wherein the filling material comprises pieces of birch wood.
8. The kiln structure of claim 1, wherein the earth layer comprises clay earth.
9. The kiln structure of claim 1, wherein the earth layer comprises sand.
10. The kiln structure of claim 1, wherein the earth layer comprises a mixture of clay earth and sand.
11. The kiln structure of claim 1, wherein the earth layer is impervious to air.

12. The kiln structure of claim 1, wherein the wood members are substantially dry.
13. The kiln structure of claim 1, wherein the wood members each have a longitudinal axis, and the wood members are stacked axially parallel to each other.
14. A process for producing charcoal from hardwood comprising the steps of:
 - a. preparing a plurality of hardwood members in a predetermined array;
 - b. supporting the axial array of hardwood members on a substantially flat surface;
 - c. constructing an air impervious kiln over the array of hardwood members;
 - d. providing an access port through the kiln, the access port extending to the array of hardwood members;
 - e. igniting the hardwood members through the access port in the kiln;
 - f. closing the access port subsequent to ignition and preventing ambient air from contacting the hardwood members;
 - g. allowing the hardwood members to burn for a first predetermined amount of time;
 - h. allowing the hardwood members to cool for approximately 24 hours after the first predetermined amount of time;
 - i. removing non-hardwood impurities from among the hardwood members;
 - j. allowing the hardwood members to cool for a second cooling period of approximately 24 hours; and
 - k. additionally cooling the hardwood members by stifling the hardwood members for approximately 48 hours.
15. The process of claim 14 wherein the step of constructing the kiln comprises the steps of:
 - c1. surrounding the hardwood members with filling material to form a surrounding jacket;

- c2. applying a layer of sawdust over the surrounding jacket; and
 - c3. applying a layer of earth material over the layer of sawdust.
16. The process of claim 15, wherein the layer of earth material comprises a composition of clay earth and sand.
17. The process of claim 16, wherein the composition of clay earth and sand is free of stone material.
18. The process of claim 16, wherein the composition of clay earth and sand is free of metal materials.
19. The process of claim 16 wherein the composition of clay earth and sand is free of stone material and free of metal material.